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A PROTOCOL FOR DEALING WITH NOISE CONCERNS DURING THE PREPARATION, REVIEW AND EVALUATION OF PROVINCIAL HIGHWAYS ENVIRONMENTAL ASSESSMENTS

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OF
TRANSPORTATION



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To all users of the: NOISE PROTOCOL

Enquiries regarding the purchase and distribution of this manual should be directed to:

RonenHouse

a division of Ronen Publishing House Inc.

505 Consumers Road, Suite 910

Toronto, ON. M2J 4V8

Phone: (416) 502 1441

(800) 856 2196

Fax: (416) 502 9410

(800) 870 7239

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This Protocol contains ares of policy agreement between the Ministries of Transportation and Communications, and Environment for dealing with noise concerns during the preparation, review and evaluation of environmental assessments for Provincial Highway undertakings.

As common understandings are resolved for any outstanding issues, these will be added to the Protocol by formal agreement.

D.P. Caplice

Assistant Deputy Minister Operations Division

Ministry of Environment

J.R. Barr

Assistant Deputy Minister Engineering and Construction

Ministry of Transportation

and Communications

1. Retrofit

The MTC policy for retrofit of existing freeways with sound barriers will remain in effect and unchanged.

2. Scope of Protocol

This protocol applies to the MTC Capital Construction Program for all classes of MTC Provincial roads, both urban and rural. The policy for each situation may require different noise control measures and further, that an assessment of the feasibility of providing noise control measures includes technical and economic considerations.

3. Definition of Noise Sensitive Areas

To be clearly defined, as guided by the One-Stage Procedural Guidelines and the specific definitions of "residential areas" and "quiet zones" found in municipal noise control by-laws, approved by MOE under the Environmental Protection Act.

4. Establishing Existing and Future Noise Levels

Presently used prediction methodologies and measurement procedures are satisfactory. Any further changes, in noise prediction methodologies or measurement procedures, shall be compatible with those of both MOE and MTC.

Staff of MTC and MOE together shall set a standard for ambient noise levels in rural areas where predictions can not be done.

5. Impact Assessment

Noise impacts for all MTC Provincial roads will be predicted based on traffic projections ten years after completion, or best available data when 10-year projections are not available.

The study area shall be defined using the smaller of one of two following methods; Using 5 decibel contour lines extending from the source to the

point where there is no increase above the ambient level, or a distance of 600 m from the source.

The noise impact on noise-sensitive land uses will be determined for outdoor spaces.

All reference to 65 dBA as a "target" and 70 dBA as a "maximum" will be removed from MTC directives A-1 and B-94. Further, reference to a 70 dBA maximum should be removed from Provincial Policy. The objective for outdoor sound levels is the higher of the Leq 55 dBA or the existing ambient. The significance of a noise impact will be quantified by using this objective in addition to the change in noise level above the ambient.

mitigation will attempt to achieve levels as close to, or lower than, the objective level as is technically, economically, and administratively feasible.

6. Noise Control Measures

The attached Table summarizes the degree of mitigation effort to be applied for various noise level increases.

On right-of-way mitigation measures will be identified, considered and implemented where warranted.

Mitigation measures within the right-of-way include: barriers, berms, vertical and horizontal alignments, pavement surfaces, etc.

Where noise increases above the ambient do not exceed 5 dBA no mitigation is required.

Where noise increases above the ambient exceed 5 dBA MTC will:

- investigate noise control measures within the right-of-way.
- if projects costs are not significantly affected and where averaged over first row receivers, a minimum attenuation of 5 dBA can be achieved, MTC will introduce the selected measures within the right-of-way.



Where a freeway is to be expanded through an existing residential area that has been included on the retrofit priority list, noise attenuation measures should be considered as part of the freeway expansion project when the MTC policy for <u>Retrofit of Existing Freeways</u> can be satisfied.

7. Documentation

MTC will increase its E.A. documentation with respect to the feasibility of all potential mitigation measures within the right-of way. The feasibility of each measure would be evaluated by such factors as effectiveness and technical and economic feasibility.

8. Construction Notes

The following is a brief outline of the procedures to be followed in handling construction noise during the Environmental Assessment process and during the construction phase. Commitment to the following shall be made in all E.A. documents:

- (a) Noise Sensitive areas will be identified;
- (b) Applicable municipal noise control by-laws will be identified and obeyed. Where timing constraints, or other municipal by-law cause hardship to MTC, an explanation of this will be outlined in the E.A. document, and an exemption from such by-law will be sought directly from the municipality in question;
- (c) General noise control measures (not sound level criteria) will be referred to, or placed into MTC documents;
- (d) Any initial complaint from the public will require verification by MTC that the general noise control measures agreed to are in effect; MTC will investigate any noise concerns, warn the contractor of any problems, and enforce its contract;
- (e) Not withstanding compliance with the "general noise control measures", a persistent complaint will require a contractor to comply



with MOE sound level criteria for construction equipment contained in the MOE Model Municipal Noise Control By-law. Subject to the results of field investigation, alternative noise control measures will be required, where these are reasonably available; and

(f) In selecting the appropriate construction noise control and mitigation measures, MTC will give consideration to the technical, administrative, and economic feasibility of the various alternatives.

9. Miscellaneous

- (a) All future technical documents referred to in this agreement and prepared to become part of the Protocol shall be jointly approved by MOE and MTC. These include:
 - ambient levels in rural areas where predictions cannot be done;
 - general construction noise control measures; and
 - any other alterations to this Protocol
- (b) As the intent of this Protocol will be followed during their preparation, joint MOE/MTC approval is not required for MOE or MTC procedural/operational documents such as:
 - internal directives;
 - · contract documents; and
 - E.A. procedural/technical guidelines.

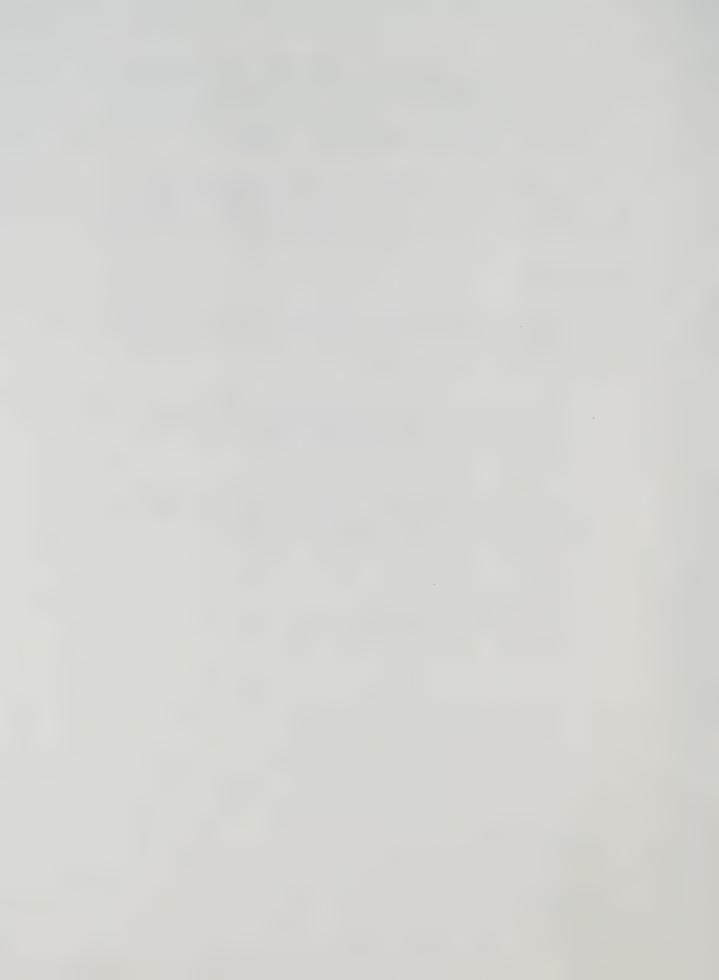


Table 1: SUMMARY OF MITIGATION EFFORT

CHANGE IN NOISE LEVEL ABOVE AMBIENT	MITIGATION EFFORT
0 - 5 dBA	-None
> 5 dBA	- Invesigate noise control measures on R.O.W.
	- If project cost is not significantly affected introduce noise control measures within R.O.W.
	- Noise control measures, where introduced, should achieve a minimum of 5 dBA attenuation, over first row recievers.
	- Mitigate to ambient, as administartively, economically, and technically feasible.



